Notes on the Feeding Habits of Scolopendra subspinipes Leach (Myriopoda)

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(Presented by Dr. Williams at the meeting of June 1, 1933)

One evening, when it was quite dark, I was approaching a street lamp, when I observed a large centipede with its mouth applied to a slug, *Veronicella leydigi* Simroth. The slug was contracted, and lying on its back. I poked the centipede, causing it to run about eight inches away from the victim. However, it completed the loop it was making by returning to the motionless slug and again applying its mouth to it. I again drove the centipede off, but it hid in the weeds and did not return while I was there.

As there is nothing in the Islands which, as far as I know, kills these leathery slugs except man and possibly these centipedes, I became interested in finding out whether Scolopendra eats these pests. To find out definitely whether the centipedes will kill Veronicella, I resolved on an experiment. Having procured a round tin can about six inches across and two-thirds as high, I set about turning up stones to locate a centipede. Having caught one, I put it in the can with a very large grey sphinx moth. This was a very foolish move, as after the centipede had eaten nearly all the moth except the eggs and appendages it would not eat for a week. I also put in a fair sized slug, about two inches long when expanded, as this was approximately the size of the one I had seen on the walk. In addition I put in some grass, weeds, and lettuce leaves. The slug was there for about four days, and every day I looked and found it alive. There were also many ants eating the remains of the moth. Then I was gone over the week-end and when I returned the slug was mouldy, limp and smelly, so I threw it out. I kept the centipede, however.

I next put in two half-grown sugar-cane grasshoppers and two slugs, one the small, brown, slimy variety very common under stones, then another *Veronicella leydigi* and more fresh lettuce. The centipede seemed to fear the grasshoppers and hid its head under the grass. That night both grasshoppers were gone. Con-

sidering the small size of the container, however, the grasshoppers were at a disadvantage not occurring under natural conditions. The next day I found the small slug dead, with its head reddish and protruding from under its mantle. I could find no wounds on it and threw it out. Under similar conditions I believe that other slugs of the same kind would live several days. The centipede was not eating it when I found it. Next I put in some papaya for the slug, and to my surprise the centipede seemed to nibble some of it. I had kept the box damp during the whole experiment, for the slugs' sake, so the centipede was not merely thirsty.

Returning from the next week-end I found the Veronicella dead but quite fresh, with a gash such as might have been cut by a razor straight across the broad white line on its ventral side. The slug was not much contracted. Its insides could be squeezed out through the hole. The centipede was not eating it, but no ants would have made such a hole. Also no ants were trying to eat the slug, as it was quite slimy. The next day I considered the case closed and threw out the contents of the can. The centipede was still quite active.

Mr. Olsen told me that the case was not proven due to the fact that I had not seen a Scolopendra actually kill a live slug. Due to pressure of studies I had no time to do this. However, I hope to do it before I leave here, by following Mr. Olsen's advice, namely, to starve the centipede about a week and then, in a dim light, to put a slug into the container with it.

Nevertheless, the evidence is almost sufficient to indicate that the centipede has a wide range of diet, including, among other things, slugs, certain kinds of fruit pulp, and at least some of the Orthoptera.